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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,170	01/18/2002	Masahiro Kanda	020066	7598

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EXAMINER

NGUYEN, CHAU N

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/050,170

Examiner

Chau N Nguyen

Applicant(s)

KANDA, MASAHIRO

Art Unit

2831

-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification merely discloses "the thermal history bonding the rubber stopper to the cable" but does not provide a detailed description to explain to one skilled in the art what is the "thermal history".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuma (5,824,962) in view of Iversen (3,816,641).

Katsuma discloses a rubber stopper (1) used in a waterproof connector (col. 2, lines 63-65), the rubber stopper being disposed between a covered cable and a connector housing of the waterproof connector. Katsuma does not specifically disclose the rubber stopper including a material that can bond the rubber stopper to a covering layer of the covered cable when the rubber stopper is heated. Iversen discloses a stopper (14) including a material that can bond the rubber stopper to a covering layer of a covered cable when the rubber stopper is heated (see the abstract, etc. the stopper is the same material as the sheath of the cable and which is heat-bonded to the cable so that the materials of the stopper and the sheath merge).

It would have been obvious to one skilled in the art to apply the teaching of Iversen in the connecting structure of Katsuma, etc. using a material (which is the same material as the sheath of the cable) which is heat-bonded to the cable so that the materials of the stopper and the sheath merge. Noted that the feature of the heating of the stopper being achieved by a thermal history in use of the rubber stopper is disclosed in the modified stopper of Katsuma since it comprises structure and material as claimed.

The modified rubber stopper of Katsuma also discloses the heating temperature during heating the stopper being higher than the temperature at which the stopper is assembled in the connector.

5. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuma in view of Iversen as applied to claim 1 above, and further in view of Wada.

The modified stopper of Katsuma discloses the invention substantially as claimed except for a rubber composition containing an organic rubber as a major constituent and a di-2-ethylhexyl phthalate.

Wada discloses a rubber composition containing an organic rubber as a major constituent and a di-2-ethylhexyl phthalate (col. 3, lines 47-48) (re claims 2 and 5). It would have been obvious to one skilled in the art to use the rubber composition as taught by Wada for the stopper (and the sheath) of Katsuma since the rubber composition taught by Wada has an excellent non-tackiness such that it can be easily handling during the connection process.

6. Claims 3, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuma in view of Iversen as applied to claim 1 above, and further in view of Yoshino.

The combination of Katsuma and Iversen discloses the invention as claimed except for the rubber including a silicon rubber as a major constituent and a bonding agent which is at least one of silyldiyne groups. Yoshino discloses a silicone rubber composition including a compound comprising at least one of silyldiyne groups (see abstract). It would have been obvious to one skilled in the art to use the rubber composition as taught by Yoshino for the stopper of Katsuma since the rubber composition of Yoshino is improved in hardness, modulus and tear strength. Noted that the feature of the heating of the stopper being achieved by a thermal history in use of the rubber stopper is disclosed in the modified stopper of Katsuma since it comprises structure and material as claimed.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 5 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen
Primary Examiner
Art Unit 2831

CN
May 27, 2003